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CASE REPORT

Angiolymphoid Hyperplasia Presenting as a Radial Artery Aneurysm

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Introduction

Angiolymphoid hyperplasia (ALH) with eosinophilia is an unusual vascular proliferation with stromal inflammation occurring predominantly in the dermis and subcutaneous tissue of the head and neck in women.[1] We report a case presenting as a radial artery aneurysm.

Case Report

A 28-year-old left-handed Muslim waiter presented with a painless swelling on the volar aspect of his left wrist. A "pyogenic granuloma" had been excised from this site 5 years previously. Since then the swelling had gradually increased in size.

On examination he had a 3 cm × 2 cm pulsatile swelling in the region of the left radial artery. There were no other problems with the cardiovascular system. Duplex scanning suggested this to be an aneurysm of the radial artery. He had a mild eosinophilia (1.0×10^9/L).

At operation, a tumour surrounding the radial artery was found (Fig. 1) and excised. The defect was repaired with a reversed cephalic vein interposition graft. Histology showed a lobular tumour containing a mixture of eosinophils, lymphocytes, plasma cells and proliferated vessels lined by epithelioid endothelial cells in a myxoid stroma. Figure 2 shows a blood vessel with prominant large pleomorphic endothelial cells and an inflammatory infiltrate rich in eosinophils, lymphocytes, histiocytes and plasma cells.

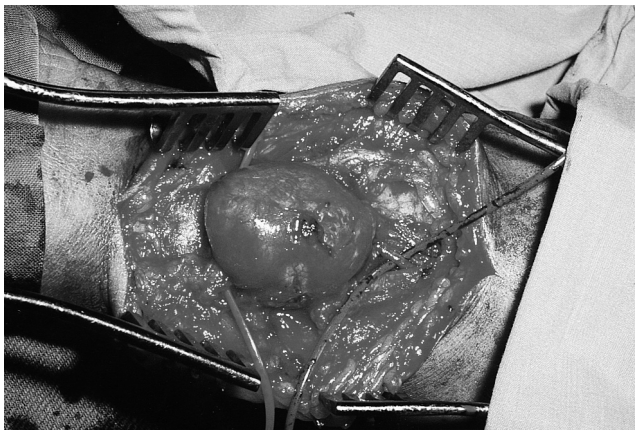

Fig. 1. Operative photograph showing the tumour arising from the radial artery.

On review 2 months postoperation the graft was working well.

Discussion

ALH was first described by Wells and Whimster.[2] ALH is a benign vascular lesion that is characterised by well-formed, capillary-sized vessels lined by histiocytoid or epithelioid endothelial cells and often accompanied by a secondary inflammatory infiltrate.[3] It is debated whether these lesions are reactive or neoplastic – this is reflected by the various names given to the condition including epithelioid hemangioma, pseudopyogenic granuloma,[1] and inflammatory angiomatous nodules.[3] There has been considerable controversy about whether Kimura's disease and ALH are related.[4,5] Recent evidence[4] shows that these are separate disease entities. Kimura's disease shows typical lymphoid follicles, is associated with lymphadenopathy and is always accompanied by peripheral eosinophilia. ALH

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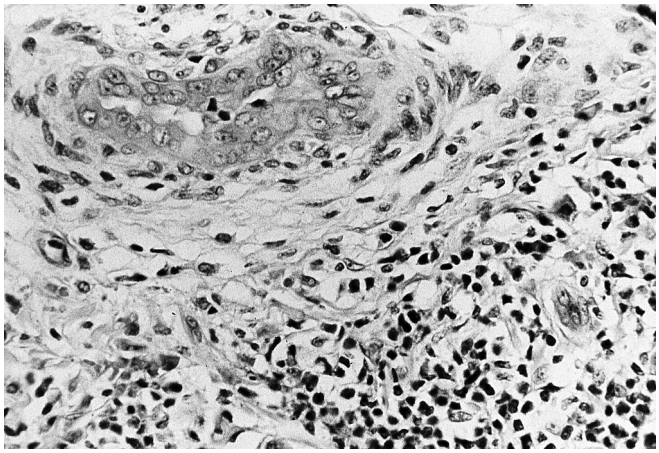

Fig. 2. Blood vessels with prominent endothelial cells and inflammatory infiltrate rich in eosinophils.

shows typical changes in endothelial cells, is characterised by superficial papules or nodules without lymphadenopathy and is frequently accompanied by peripheral eosinophilia.

This tumour has been previously reported twice arising from the radial artery.[5,6] It has also been reported in the heart.[7] The series reported by Fetsch and Weiss[3] showed that in 63% of cases an artery or vein was associated with the mass and in the majority of cases the vessel was damaged.

Previous reports[6] have shown a weak association with local trauma. Morton[6] suggests that trauma may be an initiating factor or may alter the disease process. Although there is no history of trauma in our case, the surgery performed 5 years previously may be implicated.

This rare tumour behaves in an indolent manner with occasional local recurrence.[1,6] The tumour reported in this case may represent local recurrence or the effect of trauma from the initial operation. There have been no reports of metastases.[1–7]

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